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ABSTRACT OF THE DISCLOSURE

A microcomputer with embedded flash memory is provided, which has an on-chip programming capability that allows new data to be reprogrammed by the micro-computer itself into the embedded flash memory, without having to use external repro-gramming tools. Moreover, a method is provided for programming data into the em-bedded flash memory of the microcomputer. The microcomputer includes a microproces-sor unit, an embedded flash memory unit, a register set, and a bus multiplexer. The em-bedded flash memory unit is partitioned into a loader block for storing a loader program and a user block for storing at least one user application program. The new data that are to be programmed into the user block of the embedded flash memory unit are first trans-ferred to and stored in the register set. In the embedded flash memory unit, only one of the loader block and the user block can be in active operation, which is controlled by the microprocessor unit. The microcomputer allows an on-chip programming process that allows the developer to update or change the old program data stored in the user block of the embedded flash memory unit more easily and cost-effectively, and without having to use external reprogramming tools.

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